

### **REMARKS**

Claims 17-36 were pending in this application when the present Office Action was mailed (June 16, 2004). Claims 17, 26, 27 and 28 have been amended in this Response. Accordingly, claims 17-36 remain pending in the application.

In the Office Action mailed June 16, 2004, all the claims were rejected and the specification and drawings were objected to. More specifically, the status of the application in light of this Office Action is as follows:

- (A) Figure 4 was objected to as lacking a reference numeral;
- (B) Figure 1-4 were objected to as lacking a "Prior Art" legend;
- (C) The specification was objected to as including serial numbers for applications that have since issued as patents;
- (D) Claims 17-36 stand rejected under 35 U.S.C. § 112, first paragraph;
- (E) Claims 17-36 stand rejected under 35 U.S.C. § 112, second paragraph;  
and
- (F) Claims 17-36 stand rejected under the judicially created doctrine of obviousness-type double patenting in light of U.S. Patent No. 6,254,742.

The undersigned attorney wishes to thank the Examiner for engaging in a telephone interview on September 9, 2004. During the telephone interview, the Examiner agreed that the addition of reference numeral 204 to Figure 4 would overcome the objection to Figure 4, and that labeling Figure 1 as Prior Art would overcome the objection to Figure 1. The Examiner also agreed to consider arguments presented in writing indicating that Figures 2-4 need not be labeled as Prior Art. The Examiner agreed to withdraw the Section 112, first paragraph rejections provided that case law is supplied in support of the position that the term "a" and the phrase "at least one" are both construed in patent parlance as meaning "one or more," and (b) the phrase in the independent claims relating to relative movement between a diffusion plate and microelectronic workpiece support is clarified. The requested case law

**Amendments to the Drawings:**

Enclosed herewith are amended versions of Figures 1 and 4, in which a "Prior Art" label has been added to Figure 1 and reference numeral 204 has been added to Figure 4. In accordance with the Office's revised format, the affected drawing sheets have been labeled "Replacement Sheet."

support has been provided below, and the affected claims have been amended in the manner agreed to during the telephone interview.

A. Response to the Objection to Figure 4

Figure 4 has been amended to add reference numeral 204. Accordingly, the objection to Figure 4 should be withdrawn.

B. Response to the Objections to Figure 1-4

Figures 1-4 were objected to as allegedly requiring a Prior Art designation. Figure 1 has been so amended, and accordingly, the objection to Figure 1 should be withdrawn.

As stated in the specification at page 11 lines 7-10, Figures 2-4 illustrate a reactor vessel that is described in U.S. Patent Application No. 09/112,300 (the '300 application), now issued as U.S. Patent No. 6,228,232. The filing date for the '300 application is July 9, 1998, and is therefore earlier than the priority date of the present application, which is July 12, 1999. However, applicant's attorney notes that in a declaration under Rule 131 filed with the Patent Office on November 30, 2001, the inventors established a date of invention prior to May 29, 1998. Because May 29, 1998 is prior to July 9, 1998, the Rule 131 declaration also establishes a date of invention prior to the filing date of the '300 application. Accordingly, the '300 application (including Figures 2-4, which were taken from the '300 application) are not prior art to the present application. Therefore, the objection to Figures 2-4 as lacking a Prior Art label should be withdrawn.

C. Response to the Objection to the Specification

The specification was objected to because application Serial Nos. 08/988,333 and 09/112,300 were not updated to include corresponding references to the patents issuing from these applications. The specification has been updated to include the appropriate patent numbers, and accordingly, the objection to the specification should be withdrawn.

D. Response to the Section 112, First Paragraph Rejections

Claims 17-36 were rejected under 35 U.S.C. § 112, first paragraph because the specification was alleged not to be enabling for "at least" one spiral pattern, and "at least one" of the diffusion plate member and the microelectronic workpiece support being rotatable relative to the other. During the September 9 telephone interview, the Examiner clarified that his position with regard to these objections is that (a) "at least one" spiral pattern implies that the claim can cover more than one spiral pattern, and (b) "at least one" of the diffusion plate member and the microelectronic workpiece support being rotatable relative to the other implies that either one or both can be rotatable.

With respect to item (a), the Examiner indicated that he would remove the objection to "at least one" spiral pattern if he were provided with case law in support of the position that such a term is equivalent to the indefinite article "a" and that both the indefinite article "a" and the phrase "at least one" are suitable open-ended terms. In response, applicant's attorney directs the Examiner's attention to *Scanner Technologies v. ICOS Vision Systems*, 365 F.3d 1299, 1304 (Fed. Cir. 2004), in which the court states:

This court has repeatedly emphasized that an indefinite article "a" or "and" in patent parlance carries the meaning of "one or more" in open-ended claims containing the transitional phrase "comprising." Unless the claim is specific as to the number of elements, the article "a" receives a singular interpretation only in rare circumstances when the patentee evinces a clear intent to so limit the article. (Citations omitted).

In the *Scanner Technologies* case, the court interpreted the term "an illumination apparatus" in U.S. Patent No. 6,064,756 to include one or more illumination apparatuses. The court further stated that:

Turning to the specification, we find no evidence of a clear intent on the part of the patentees to limit the claim language at issue to a single illumination source. Even where the specification refers to "a light source," there is no indication that the patentee intended to *limit* the claims to the single light source. At best, the specification is inconclusive on the issue of one versus multiple light sources.

...

Where a "comprising" claim includes the article "a" or "and," and the specification is at best inconclusive on the patentee's intent to limit that article to a single element or step, we do not find a "clear intent" to so limit the claims. (*Id.* at 1305).

In light of the foregoing, the phrase "at least one spiral pattern" is appropriate and should be read to include one or more spiral patterns. Accordingly, the Section 112, first paragraph rejection of the claims on the basis of this language should be withdrawn.

With reference to item (b), claims 17 and 28 have been amended to remove the "at least one" phrase as it relates to the diffusion plate member and the microelectronic workpiece support, and replace it with the phrase "wherein the apparatus is configured for relative motion between the diffusion plate member and the microelectronic workpiece support." This amendment is provided for clarification purposes only, does not limit the scope of this claim element, and is intended to be at least as broad as the phrase it replaces. Specifically, the phrase is intended to cover the case where the diffusion member is rotatable, and/or the microelectronic workpiece support is rotatable, so long as there is relative rotational motion between these two components. The specification clearly provides supports for relative movement between these elements. Accordingly, the Section 112, first paragraph rejection of the claims on the basis of the foregoing language should be withdrawn.

E. Response to the Section 112, Second Paragraph Rejections

Claims 17 and 28 were rejected under 35 U.S.C. § 112 because the phrase "being rotatable" was allegedly indefinite. Without commenting on or conceding the merits of the Examiner's position with regard to this language, applicant's attorney notes that this rejection is now moot because the term "being rotatable" has been eliminated from these claims, as discussed above.

Claims 26 was rejected under 35 U.S.C. § 112, second paragraph because the phrase "further comprising the process chamber" was allegedly redundant or confusing. Without commenting on or conceding the merits of the Examiner's position, and in an effort to expedite prosecution of these claims, applicant has amended claim 26 to be in

independent form, and has amended claim 27 to depend from claim 26. Accordingly, the Section 112, second paragraph rejections of claims 26 and 27 should be withdrawn.

F. Response to the Obviousness-Type Double Patenting Rejections

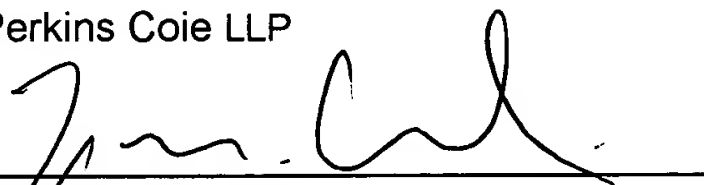
Claims 17-36 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,254,742. Applicant's attorney does not comment on or concede the merits of this rejection, but in an effort to expedite issuance of this application, provides the enclosed terminal disclaimer. In light of this terminal disclaimer, the obviousness-type double patenting rejection should be withdrawn.

G. Conclusion

In view of the foregoing, the claims pending in the application comply with the requirements of 35 U.S.C. § 112 and patentably define over the applied art. A Notice of Allowance is, therefore, respectfully requested. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-3257.

Respectfully submitted,

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